

REMARKS

In response to the Office Action mailed January 21, 2004, Applicants respectfully request reconsideration in view of the above amendments and the following remarks.

Rejections Under 35 U.S.C 102

Claims 1, 6 18 and 19 were rejected under 35 U.S.C. §102(b) as being anticipated by Droege (US 5,945,084). Applicants respectfully traverse this rejection because it is respectfully submitted that Droege does not teach “infiltrating a solution containing a plurality of carbon aerogel precursors wherein the ratio of hydroxylated benzene compound to catalyst is less than 1000 into a pre-formed polymer foam, or fiber-mat...” as recited in Applicants’ amended claim 1, but rather teaches a formulation “wherein the molar ratio of said hydroxylated benzene compounds to said catalysts in said reaction mixture, R/C, is greater than about 1000...” (See Droege col. 14, lines 29-31.) “We have found...by moving to lower catalyst concentrations (i.e., an R/C value of greater than about 1000, yielding an initial room temperature pH of lower than about 6.0), new organic gels are obtained...[which] are sturdy enough to withstand simple (and cheap) evaporative drying....” (See Droege col. 6, lines 35-50.) In addition, Droege stresses the importance of having an R/C value greater than 1000 throughout the disclosure. (See Droege abstract; col. 1, lines 16-17; col. 7, lines 2-5; col. 8, lines 51-67 and col. 9, lines 1-8; col. 10, lines 8-9; col. 10, lines 43-44; col. 10, lines 56-57; col. 12, lines 54-55; col. 13, lines 3-4; col. 14, lines 29-30; col. 15, line 58; col. 16, line 15; col. 16, line 42;

col. 17, line 13; col. 17, line 47; col. 18, line 13; and col. 19, Table 1.) Thus, it is respectfully submitted that the rejection be withdrawn.

Support for the amendment to claim 1 can be found in Applicants' specification in paragraph [0014] on page 4, in Applicants' specification in paragraph [0015] on page 5, and in the general knowledge of those skilled in the art. Those skilled in the art will know that the term "organic gel precursor solution" refers to a mixture containing a hydroxylated benzene compound, an aldehyde, a catalyst and water. Resorcinol is a commonly used hydroxylated benzene compound precursor, but those skilled in the art realize that other hydroxylated benzene compounds such as phenol, catechol, hydroquinone and phloroglucinol are routinely substituted for resorcinol in the organic gel precursor solution. Thus, Applicants' disclosure that "[b]y way of example, an organic gel precursor solution, composed of resorcinol, formaldehyde, sodium carbonate and water..." supports the amendment to claim 1. Additionally, Applicants' disclosure that "[t]he following is a specific example of the invention...an organic gel solution composed of 12.4 grams of resorcinol...22.3 grams of 0.1 molar sodium carbonate..." results in an R/C value of about 50, and thus, also supports the amendment to claim 1.

Rejections under 35 U.S.C. 103(a)

Claims 4, 7 and 8 were rejected as being unpatentable over Droege. Since claims 4, 7 and 8 depend from what Applicants respectfully submit is allowable subject matter, i.e., claim 1, Applicants submit that claims 4, 7, 8 also contain allowable subject matter.

CONCLUSION

The undersigned respectfully submits that, in view of the foregoing amendments and the foregoing remarks, the rejections of the claims raised in the Office Action dated January 21, 2004 have been fully addressed and overcome, and the present application is believed to be in condition for allowance. It is respectfully requested that this application be reconsidered, that the claims be allowed, and that this case be passed to issue. If it is believed that a telephone conversation would expedite the prosecution of the present application, or clarify matters with regard to its allowance, the Examiner is invited to call the undersigned attorney at (925) 422-6458. In the unlikely event that the Patent Office determines that an extension and/or other relief is required as a result of this statement, applicants petition for any required relief including extensions of time and authorize the Assistant Commissioner to charge the cost of such petitions and/or other fees due to our Deposit account number 12-0695. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

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